



Published by
E. HARRISON CAWKER. Vol. 21, No. 6.

MILWAUKEE, OCTOBER, 1886.

TERMS: \$1.00 a Year in Advance
Single Copies, 10 Cents.

BEFORE TRIAL!

SPERRY FEEDER CO.

MINNEAPOLIS, MINN.

Increase Capacity, Increase Yields, Better Grades, Reduce Running Expenses, by using our Feeders.

Refer to the following mills in which our Feeders have been adopted:

MINNEAPOLIS, MINN.
Pillsbury A,
Pillsbury B,
Anchor,
Washburn A,
Washburn C,
Northwestern,
Pettit,
Columbia,
Crown Roller,
Dakota,
Galaxy,
R. D. Hubbard & Co.,

PENNSYLVANIA.
H. S. Klinger & Co., Butler.
D. & A. Lukenbach, Bethlehem.
Melbourne Mills, Philadelphia.

NEW YORK.
Jewell Milling Co., Brooklyn.
Jones & Co., New York City.
Kings Co. Mill Co., Brooklyn.

OHIO.
Schumacher Milling Co., Akron
R. D. Hubbard & Co., Mankato, Minn.; Austin Herr, Washington, D. C., and others.

CALIFORNIA.

Sperry & Co., Stockton.
Pioneer, Sacramento.
McGrath & Bro., Sacramento.
Horace Davis, San Francisco.
Golden Age,
Del Monte,
General Bidwell, Chico.
Girdley Mills, Girdley.
Victor Mills, Hollister.

AFTER TRIAL!

Lamar, Mo., July 29, 1886.

J. A. MCANULTY.

Dear Sir:—Please send us two more Feeders for 9 x 18 Allis double rolls, and one for 9 x 14 style B. We are convinced from our experience with the one sent us that they will increase our capacity and yield materially. Ship as soon as possible and send bill.

Yours Respectfully,

Brand, Dunwoody & Co.

Lamar, Mo., July 7, 1886.

SPERRY FEEDER CO.

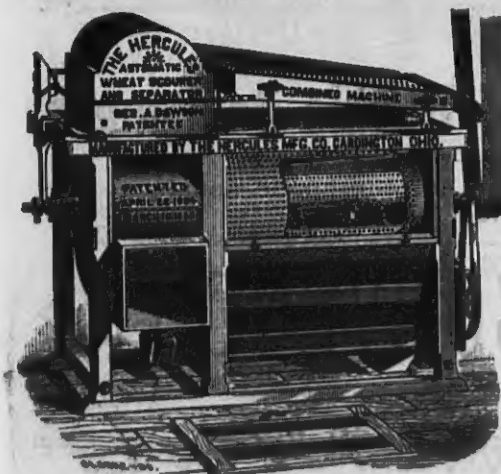
Gentlemen:—Please send us one Feeder 9 x 18 Allis Roll (double). If satisfactory we will want two more of the same kind and one for 9 x 14 style B.

Respectfully,

Brand, Dunwoody & Co.

The only Force Feed Made for Feeding Mill Stock

Do You Want Clean Wheat?



HERCULES
Automatic Wheat Scourer and Separator.

Warranted to improve the COLOR and VALUE of flour in any mill. Anti-Frictional, Light Running and the only AUTOMATIC WHEAT SCOURER ever invented. Adjusts itself while in motion to the volume of wheat fed to it and requires no attention but oiling. Awarded GOLD MEDAL and highest honors at the late WORLD'S FAIR, NEW ORLEANS. Machines sent on 60 days trial and satisfaction guaranteed or no pay. Write for Circulars, Testimonials and Samples of Cleaned Wheat and Scourings.

THE HERCULES MFG. CO., Cardington, Ohio.

IT HAS INCREASED OUR TRADE.

THE HERCULES MANUFACTURING CO., Cardington, Ohio.

Gentlemen:—We like the "Hercules" machine very much indeed. It has increased our trade, and we will buy another for our other mill in the Spring. It certainly is the best Scourer we know of.

[Mention this Paper when you write.]

Yours Respectfully,

SCHREURS BROS.

SCHREURS BROS.,
PROPRIETORS OF YOUNG AMERICA ROLLER MILLS,
Muscatine, Iowa, December 9th, 1885.

CAWKER'S AMERICAN FLOUR MILL DIRECTORY FOR 1886

ISSUED FEBRUARY, 1886. PRICE, \$10.00.

SENT BY MAIL, REGISTERED AND POST-PAID. EVERY

Mill Furnisher, Flour Broker, Transportation Company, Insurance Company,
FLOUR IMPORTER, MERCHANT MILLER,

Or anyone desiring to reach those connected with the FLOURING INDUSTRY, should order this Book at once.

E. HARRISON CAWKER, NO. 124 GRAND AVENUE, MILWAUKEE, WIS.

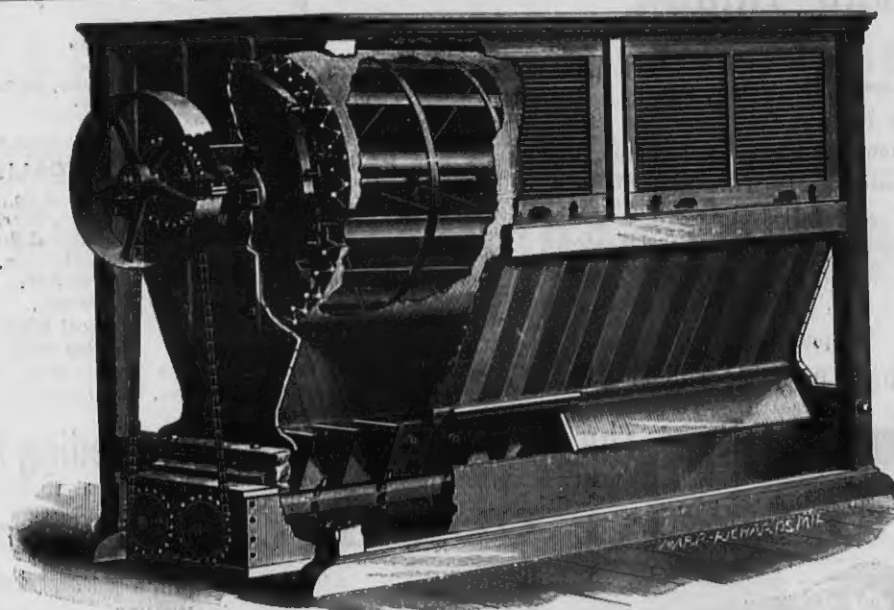
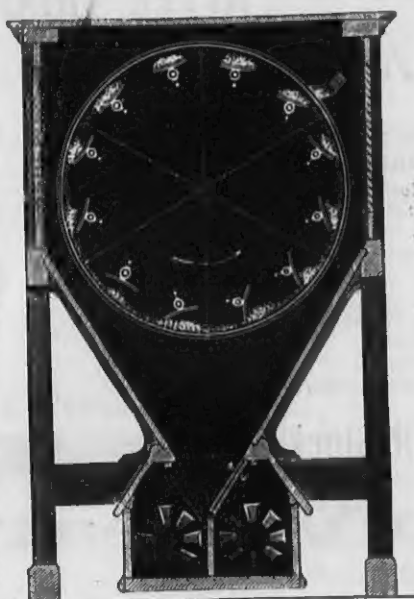
The Gilbert Flour Dresser!

FULLY GUARANTEED IN EVERY RESPECT.

Slowest Running Reel on the Market, and the Most Perfect Bolting Device ever known.

ONLY 16 TO 18 REVOLUTIONS A MINUTE.

SEVEN DIFFERENT SIZES BUILT.



SEVEN DIFFERENT SIZES BUILT.

Greater Capacity than any Six Sided Reel of Double its Length.

In building New Mills this Bolting System can be placed in about half the space usually required, thereby saving room and expense.

◇ MILWAUKEE ◇ SPIRAL ◇ CONVEYOR, ◇

(PATENT GRANTED JUNE 16th, 1886.)



It is light running, delivers the stock in a steady stream. Will carry anything any other Conveyor will. No flights to be stripped. Capacity unlimited. Can be run at any speed.

FOR FURTHER PARTICULARS, ADDRESS

COCKLE SEPARATOR MFG. CO.,

MILWAUKEE, WIS.

Manufacturers also of Kurth's Patent Improved Cockle Separator, Wilcox Tailings Cleaner, Milwaukee Spiral Conveyor, and Gilbert Magnetic Separator.

BELLAS, PATTON & CO., Commission Merchants

3 INSURANCE EXCHANGE BLDG.,

218 La Salle St., CHICAGO.

GRAIN AND PROVISIONS.

Bought or sold for shipment, or carried on margins.
Market Reports furnished to correspondents.

(ESTABLISHED 1855.)

J. O. Mathewson & Co., GENERAL COMMISSION MERCHANTS, AUGUSTA, - GEORGIA.

E. B. OWENS & CO., Provisions and Grain BALTIMORE, MD.

Sell on Track West and to Arrive.
Fine Storage Cellars for Meat and Lard.
Handle all kinds of Grain.
Liberal Advances on Consignments.

REFER TO Western National Bank, Baltimore; Citizens' National Bank, Baltimore; Wm. Ryan & Sons, Dubuque, Iowa; Whitmore Bros., Quincy, Ill.; Bloomington Pork Packing Co., Bloomington, Ill.

L. EVERINGHAM & CO., (ESTABLISHED 1855.)

Commission Merchants

300-301 Royal Insurance Building,
Opposite New Board of Trade, CHICAGO

THE PURCHASE AND SALE OF
GRAIN AND PROVISIONS
On the Chicago Board of Trade.
For cash or future delivery, a specialty.

Special information, indicating course of markets,
freely furnished upon request.

WM. GRIFFITHS, JAMES MARSHALL, GEO. E. DODGE

GRIFFITHS, MARSHALL & CO., GRAIN :: COMMISSION MINNEAPOLIS AND DULUTH, MINN.

Orders for Choice Milling Wheat Given Special
Attention.

FLOUR :: BROKERS

MILLERS DESIRING TO SELL FLOURS BY SAMPLE in car lots in the cities of Baltimore, Md., or Washington, D. C., should communicate with P. H. HILL, Millers' Agent, WASHINGTON, D. C., and for Philadelphia, Pa., communicate with HILL & SCHAAF, Millers' Agents and Grain Brokers, 319 North Broad St., PHILADELPHIA, PA. Highest references.

SAM'L E. DUNHAM & CO., COMMISSION

Provisions and Grain

ROOM 83,

Board of Trade, CHICAGO.

The purchase of grain for shipment to home markets
a specialty.

N. S. CLARK.

A. C. MARTIN.

CLARK & MARTIN, Commission Merchants FLOUR, GRAIN, FEED AND HAY, No. 51 West Second St., Cincinnati, O.

PATTERSON BROS. & CO., Commission Merchants

FOR SALE OF

WHEAT, CORN, OATS, RYE.

DEALERS IN

Seeds, Hominy, Grits, Steam Dried Corn Meal.

44 VINE ST., CINCINNATI.

ORDERS AND CONSIGNMENTS SOLICITED.

ESTABLISHED - - - - - 1870.

JNO. R. TURRENTINE, —GENERAL— Merchandise and Produce Broker, FLOUR, GRAIN, HAY AND RICE. Dock Street, WILMINGTON, N. C. MEMBER OF CHICAGO BOARD OF TRADE.

Refers by permission to A. K. Walker, Esq., cashier
First Nat'l Bank, Hall & Pearsall, Adrian & Voller,
Merchants, Wilmington; Robt. Carey & Co., New Orleans,
La.; Geo. P. Plant & Co., St. Louis, Mo.; Martin
& Bennett, Chicago, Ill.

Solicits Orders for Carolina Rice and Peanuts.

OWEN & BRO., Commission • Merchants, 36 Chamber of Commerce, MILWAUKEE.

We give special attention to the purchase and sale
of grain or provisions, for future delivery, here or
in other markets.
Information regarding the present condition and
future outlook for prices furnished on request.
OWEN & BRO.

S. S. STOUT.

H. G. UNDERWOOD.

STOUT & UNDERWOOD, (Formerly Examiners U. S. Patent Office.) SOLICITORS OF

PATENTS

66 Wisconsin Street,
MILWAUKEE, WIS.
TELEPHONE No. 502.

Life Insurance. New England Mutual

LIFE INSURANCE CO.

OF BOSTON.

Assets, - - - - - \$17,846,546.65
Liabilities, - - - - - \$15,288,761.16

Total Surplus, - - - \$ 2,607,785.49

BENJ. F. STEVENS, Pres't.
JOSEPH M. GIBBENS, Sec'y.

BOILER INSURANCE.

AMERICAN

Steam Boiler Insurance Company

OFFICE, 45 WILLIAM ST., NEW YORK.

Cash Capital, \$200,000

ASSETS JANUARY 1st, 1885.
U. S. Gov. Registered Bonds, of which \$100,000 is lodged with the Insurance Department at Albany, N. Y. \$216,188.00
Cash in bank and in office 10,688.72
Premiums in course of collection 16,839.35

\$243,694.33

LIABILITIES.

Reinsurance reserve 40,225.00
All other demands 2,013.27

\$ 43,149.24

WILLIAM K. LOTHROP, President.
WILLIAM E. MIDDLEY, Vice-Pres.
VINCENT R. SCHENCK, Secretary.

Fire Insurance.

Every miller and manufacturer having an
A 1 risk, should apply for insurance in the
Allied Mutual Fire Insurance Companies, of
which S. H. Seamans, Milwaukee, Wis., is
secretary.

CONNECTICUT

FIRE INSURANCE CO.,

HARTFORD, - CONNECTICUT.

Cash Capital, - - - - - \$1,000,000 00
Reserve for Reinsurance, - - - 580,680 40
Outstanding Claims, - - - 90,396 57
Net Surplus, - - - - - 303,633 78

Total Assets, Jan. 1, 1886, - \$1,974,749 75
Surplus to Policy-holders, - \$1,303,633 78

J. D. BROWNE, President,
CHARLES R. BURT, Secretary.
L. W. CLARKE, Asst Secretary.

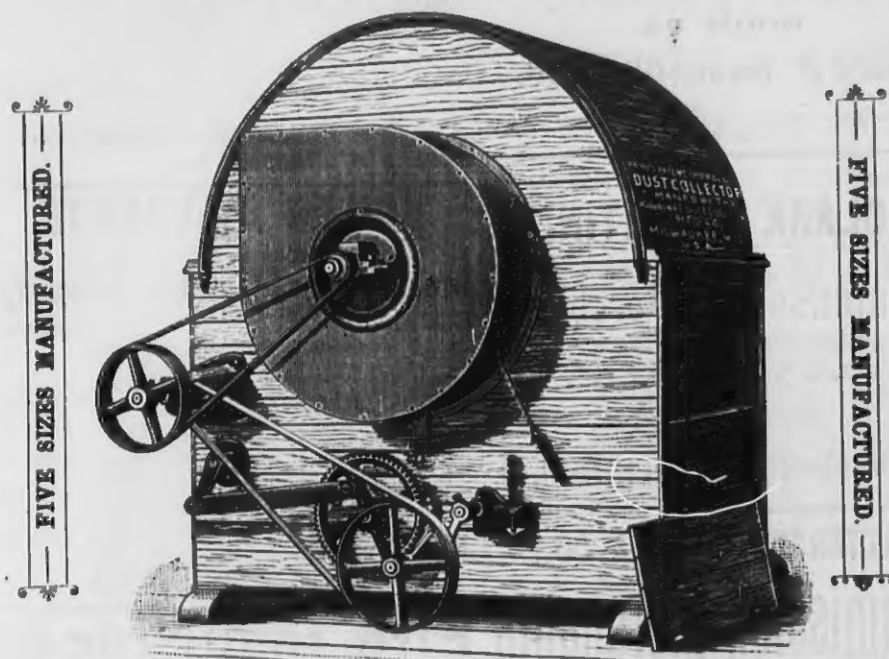
Attention! CUSTOM and EXCHANGE MILLERS.

We have made arrangements with Potter & Huntington, whereby we can furnish one of their EXCHANGE TABLES and UNITED STATES MILLER for one year, for \$1.50; the price of the Exchange Table alone is \$1.00. This is probably the best Table ever prepared for Millers doing an Exchange or Custom Business. The range is from 25 to 36 lbs. of flour to each 60 lbs. of wheat, and corresponding amount of bran and middlings. (Toll and waste in milling deducted.) There are twelve Tables each of a different grade of wheat, and each Table a different amount of flour and feed and can be used for any amount of wheat, from two lbs. up to any No. of bushels. There is no guess work about it, but all from actual experience. By it the Miller is always sure of his allowance of Toll. Hundreds of them are being sent to all parts of the United States and Canada. Send us One Dollar and Fifty Cents and we will send the Table and credit you for one year's subscription to the UNITED STATES MILLER. Address, UNITED STATES MILLER, 124 Grand Avenue, Milwaukee, Wis.

IMPROVED

PRINZ PATENT DUST COLLECTOR.

6000 IN SUCCESSFUL OPERATION.



FIVE SIZES MANUFACTURED.

FIVE SIZES MANUFACTURED.

ADDRESS FOR

"Treatise on Dust Collection," containing 50 pages of testimonials,

Milwaukee Dust Collector Mfg. Co.,
MILWAUKEE, WIS.



Howe Scales

— AND —

HARRISON CONVEYOR

Borden, Selleck & Co.,

GENERAL AGENTS,

CHICAGO, ST. LOUIS, CLEVELAND, CINCINNATI,
48-50 LAKE ST. 612 N. 3d STREET. 114 WATER ST. 106 MAIN STREET.

Howe Scales—Over 350 Modifications.

GRAIN TESTERS, FLAX TESTERS,
CAR MOVERS,
BARBED WIRE STRETCHERS,
TRUCKS, BAGGAGE BARROWS,
COFFEE AND DRUG MILLS,
STEEL GRAIN SCOOPS,
OIL TANKS, LETTER PRESSES,
STANDARD, LIQUID AND DRY MEASURES.

Do Your Own PRINTING.

Card Press, \$3.00
Circular Size, 8.00
Newspaper " 44.00

TYPE SETTING
etc. is Easy
by our printed
instructions.
For home or
business use
old or young
Send 3 stamps
for Catalogue of Presses,
Type, Cards, &c., to factory.
KELSEY PRESS CO.
Meriden, Conn.

AGENTS WANTED. SAMPLES
FREE!
Goods SELL everywhere, to Everybody.
BIG PAY! A pocket case of EIGHT Lovely
SAMPLES, with our terms, **FREE TO ALL.**
Send your address, and 3 stamps for mailing. Address
THE HOLLEY WORKS, Meriden, Conn.

FOR SALE

10,000 acres of Hardwood and Agricultural
Lands near Lake Superior, **AT \$3.00 TO**
\$5.00 PER ACRE. 4,000 acres in the
Iron River Country, at low rates.

A RARE OPPORTUNITY FOR A GOOD FIND.

IF YOU WISH TO BUY
CITY PROPERTY IN DULUTH,
OR PINE, IRON OR FARM-
ING LANDS,

(ADDRESS)

LUCIEN * J. * BARNES,

Room No. 2, Exchange Building,
DULUTH, MINN.

Mills • For • Sale.

Short advertisements will be inserted under this head
for One Dollar each insertion.

FOR SALE

A first-class 40-barrel water power stone
and roller flour mill, situated within forty
rods of side track of the C. M. & St. P. R. R.
Country all settled up. Last year's grinding
20,000 bushels on custom work. Address
H. F. FISHER, Camp Douglas, Wis.

FOR SALE.

A Flour Mill in a good wheat section on
D. R. G. R. R., Colorado. Finest of Water
Power. Three runs of Burrs, Centrifugals
and Cleaning Machine, all in best conditions.
Good reasons for selling, and special induc-
ements given to purchasers. For terms, etc.,
address FRED. PISCHEL, La Veta, Col.

MILL FOR SALE.

The whole or half interest in a 50-barrel
full roller mill, on account of death of part-
ner. Good winter wheat section, climate
and location. Will take one-third on the
whole value in Western land. Address
"EAGLE ROLLER MILLS," Plymouth, Ill.
or U. S. MILLER, Milwaukee, Wis.

FLOURING MILL AND ELEVATOR FOR SALE.

All or one-half interest in a first-class 75-barrel
steam flouring mill and elevator. All new and in
good order. Located at Meriden, Jefferson Co., Kan.,
on the Atchison, Topeka & St. P. and the L. T. & S. W.
Railroads; in the best wheat and corn growing
county of the state. Building, heavy frame, 36x40,
three stories, attic and basement, with stone engine
room 22x34; all under iron roof. Capacity of
elevator, 16,000 bushels; corn crib, dump and sheller.
Side track to mill. Two sets 9x18 Allis Rolls; three
burrs on wheat, one on corn; flour packer, scales,
etc.; two Smith Purifiers; Barnard & Leas Separator;
one 12-foot two-reel chest; one 16-foot four-reel chest;
corn meal bolt; California Brush Finisher; one
Western Corn Cleaner. Grain trade more than pays
all running expenses. A splendid chance for a good
mill. Exchange trade good. Mill cost over \$16,000.
Will sell all for \$12,000; half cash, or half interest for
\$6,000, half cash, or, if not sold by July 1st, will be
leased for a term of years to responsible parties.

J. O. PEEBLES, Sec'y,
MERIDEN MILL CO., Meriden, Kan.

FOR SALE.

Half interest in 2-run Custom Water Power
Flouring Mill. Dwelling house of 9 rooms
and Ferry across Wisconsin river. Situated
eight miles North of Kibourn City, Wis.
Price, \$1000.00. The other interest may be
bought at about same price. For particulars
address M. F. WALTON, 584 Washington
Street, Milwaukee.

FOR SALE OR RENT

THE ELEGANT

STONE

GRIST AND FLOURING MILL,

— IN THE —

VILLAGE OF DELAFIELD, WAUKESHA CO., WIS.

Water Power, unfailing. All in A 1
condition for business. Also two good Resi-
dences with Barn and Out-buildings. A
bargain for the right man. Address,

M. H. BUCK, WAUSAU, WIS.

WANTED.

A situation by a good practical Roller
Miller. Have worked in a Mill of 66
Rolls. References can be given.

P. BERGER,

134 Reed St., Milwaukee, Wis.

PATENTS THOS. P. SIMPSON, Washington, D. C.
No Pay asked for patents until ob-
tained. Write for Inventor's Guide.

UNITED STATES MILLER.

E. HARRISON CAWKER, EDITOR.

PUBLISHED MONTHLY.

OFFICE, No. 134 GRAND AVENUE, MILWAUKEE.

SUBSCRIPTION PRICE—PER YEAR, IN ADVANCE.

To American subscribers, postage prepaid..... \$1.00
 To Canadian subscribers, postage prepaid..... 1.00
 Foreign subscriptions..... 1.25
 All Drafts and Post-Office Money Orders must be made payable to E. Harrison Cawker.
 Bills for advertising will be sent monthly, unless otherwise agreed upon.
 For estimates for advertising, address the UNITED STATES MILLER.

[Entered at the Post Office at Milwaukee, Wis., as mail matter of the second-class.]

MILWAUKEE, OCTOBER, 1886.

We respectfully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in the UNITED STATES MILLER. You will thereby oblige not only this paper, but the advertisers.

MILWAUKEE AMUSEMENTS.

ACADEMY OF MUSIC—Performances every evening, Wednesday, Saturday and Sunday matinees.

GRAND OPERA HOUSE—Performances every evening, and Wednesday, Saturday and Sunday matinees.

DIME MUSEUM—Performances every hour from 1 P. M. to 10 P. M. every day.

NEW PEOPLE'S THEATRE.—Performances every evening, and Wednesday, Saturday and Sunday matinees.

MILWAUKEE INDUSTRIAL EXPOSITION closes Oct. 17.

PALACE THEATRE—Every evening, Wednesday, Saturday and Sunday Matinees.

STADT THEATRE—(German)—Wednesday, Friday and Sunday evenings.

THE October estimate of the U. S. Department of Agriculture indicates a total corn crop of about 1,600,000,000 bushels.

H. P. YALE & Co., one of the oldest machinery and supply houses in Milwaukee, have their card in this paper. Read it. They can supply your wants at bottom prices.

THE production of flour in Minneapolis mills for the year ending August 31, 1886, was 5,936,530 barrels, and the exports for the same period was 2,408,590 barrels.

JUDGES in Detroit and Baltimore have recently decided that lying to sell goods does not constitute false pretense. The liars may now proceed to prevaricate and tergiversate, until these decisions are reversed.

THE *Weekly Underwriter*, a well known New York insurance paper, believes "that on the whole, fire underwriting is as secure an occupation as farming," and we may add, a plaguey sight less laborious.

THE "irrepressible Yankee" is never behind time. Since the recent earthquakes an Earthquake Insurance Company has been started, and it is thought a lively business will be done, especially in the neighborhood of Charleston, S. C.

IT is said by good English authority that the home crop of wheat in Austria-Hungary will not be sufficient for home consumption, consequently there will be little exported excepting of high grade flour.

THE *Cincinnati Price Current* says: When one goes through the manufacturing establishments of the country generally, and sees

the careless, not to say filthy, condition in which most of them are kept, he is never surprised at hearing of one burning. His surprise is rather that they do not all burn.

IT is strange to note, that this country, so full of iron, should be importing at the present time large quantities of that ore. Since January 1, no less than 667,000 tons of iron have been imported at the ports of Baltimore and Philadelphia, against about 250,000 tons during the corresponding period last year.

JOHN D. PUTNAM, the Democratic nominee for Lieutenant Governor of Wisconsin, is a great-grandson of Gen. Putnam of revolutionary fame, and is forty-nine years old. He was born in Brooklyn, Conn., and came to Wisconsin many years ago. He was a Democratic member of the legislature in 1882, and is now mayor of River Falls. He is a prosperous miller.

AND now comes the report that another one of those "high moral cusses" has "gone to the bad." This time it is Wm. F. Gould, of Portland, Me., son-in-law of Neal Dow, the celebrated Maine Prohibitionist, and the amount of "boodle" taken is reported to be not less than \$87,000. He attended church regularly, preached moral sermons to young men, was sought for advice on financial matters, etc.

A DELEGATION of Minnesota and Dakota farmers recently visited the Minneapolis Chamber of Commerce, with a view to making arrangements to sell their own wheat. They propose to have one of their own number on the board to sell their wheat as a commission man, and thus save the percentage for handling heretofore paid to the local dealer. Theoretically the scheme is good; practically it won't work. It will end in a grand row among the grangers.

TWO hundred carloads of barley have been bought in California for brewing firms in Milwaukee, and fifty carloads are now on the way here. They were shipped from San Francisco by the Southern Pacific Railway to New Orleans; to New York City by water; thence to Buffalo by the Hudson River and the Erie Canal, and thence to Milwaukee by the Anchor Line. This round-about way is taken because freights are cheaper than by other routes.

MACHINERY ON TRIAL.—Buyers of machinery on trial, subject to their approval after operation for a stated period, should remember that they can be held legally responsible for the price of the machinery if they fail to signify their rejection of the same within the specified time. Usually there is a well-understood agreement in these matters; but sometimes there is not, and in such cases it is only just that if the machine purchased is not satisfactory the user should notify the seller as soon as the fact becomes apparent.

IT is a true saying that Waukesha Mineral Rock Spring water beats all other waters in purity and quick action upon the kidneys and urinary organs. For daily use as a beverage, without exception, it is the best water in the known world. Its keeping qualities

are perfect in galvanized iron cans, there being nothing in it to decompose or be affected by warm weather. If any of our readers want a good thing in the way of pure, wholesome water, send to C. C. Olin, Manager of Mineral Rock Spring at Waukesha, and your want will be supplied at once. Analysis and price list furnished to all enquirers for this celebrated water.

THE Sperry Feeder, manufactured by the Sperry Feeder Co. of Minneapolis, seems to be one of the most popular special devices introduced on the market for years. The demand has been so great that the company has been compelled to move to larger and better quarters.

ABRAHAM LINCOLN, many years ago, in an address delivered in the city of New York, gave the following advice to workingmen, which is pertinent at this time. He said: "That some should be rich, shows that others may be rich, and hence is but encouragement to industry and enterprise. Let not him who is homeless pull down the house of another, but let him labor diligently and build one for himself, thus by example assuring that his own shall be safe when built."

WE have the pleasure to announce the marriage, Oct. 5, 1886, of Mr. S. H. Seamans of Milwaukee to Miss Martha L. Edgerton of Oconomowoc, Wis. Mr. Seamans' thousands of friends, especially among millers throughout the United States, we know will join us in wishing the newly wedded pair a long and happy life. On their return from a short tour Mr. and Mrs. Seamans will be at home, in Wauwatosa, Wis., a charming suburb of Milwaukee.

THE GILBERT FLOUR DRESSER.

The Cackle Separator Mfg. Co. of Milwaukee have placed the GILBERT FLOUR DRESSER on the market. They have done this after satisfying themselves by long and carefully conducted experiments that the machine is a good one. The machine is built in a very substantial manner, and it will doubtless meet with a large sale. Full description of the machine will be sent by addressing this company as above noted.

THE Minneapolis Exposition for 1886 has just closed amid a blaze of glory. The writer has long known that the people of Minneapolis were enterprising, but we must confess we were very much surprised to see such a large and attractive exhibition as the one just closed. It has been a complete success in every way. The milling interests were well represented. A larger assortment of milling machinery has not been seen together in this country since the Miller's Exhibition in Cincinnati in 1880. The contrast in the machines exhibited then and now is indeed great. We are gratified to learn that Mr. C. M. Palmer, publisher of the *Northwestern Miller*, has been elected manager for the next year, and it goes without saying that all milling interests will be most faithfully looked after.

DURING the year ending March 31, 1886, the great packing house of Armour & Co., sold \$43,000,000 worth of goods. They killed during that year, 1,133,479 hogs, 330,652 cattle,

and 635,262 sheep, and produced 55,142,952 lbs. of lard, 85,918,460 lbs. salted meats, 51,508,396 lbs. pickled meats, 4,062,459 lbs. spiced meats, 8,219,630 lbs. green hams and shoulders, 54,009,729 lbs. smoked meats, 33,696,460 lbs. canned meats, and 22,461,522 lbs. fertilizers. Armour & Co.'s buildings cover thirty acres of ground, and furnish a floor area of eighty-eight acres. Their chill-room and storage area is stated at twenty acres, and their storage capacity at 90,000 tons. During the summer season they employ 4,000 men and during the winter season 5,000. Their annual pay roll exceeds \$4,000,000. In short it is by all odds the greatest packing establishment in the world.

OAT-MEAL MILLING.

It is claimed by many oat-meal millers, and by some now out of the business, that the manufacture of oat-meal at the present time is, for most mills, not profitable. It takes from 10 to 12 bushels of good oats to make a barrel of good oat-meal, to the cost of which must be added cooperage, etc. The residuum from the oats, after the meal is made, is not in good demand, and seldom brings a good price. The consumption of oat-meal in this country is comparatively small, and only low grades are suitable for export, as there is little demand in Europe for high grade. Small oat-meal mills, as a rule, do not pay, and large ones must be run with the greatest economy. A great many oat-meal mills constructed during the last few years are now idle.

THE *New Orleans Picayune* predicts a boom in the rice trade. In its issue of Sept. 15 it says:

Already the clean article is being taken up as fast as the mills can turn it out, and prices have advanced, but are still below the parity of the "rough," which clearly necessitates a further improvement. The marketing of last year's large crop pushed Louisiana rice into every market in the country and created a universal demand for it; hence it seems plausible that as soon as it is generally known that the crop is so superior in quality and safe to handle a demand will spring up on all sides.

A very favorable feature is the decrease in the stocks of foreign rice held in Europe and the advance of prices in London. In India, the greatest producing country, rice has advanced 30 per cent. during the past twelve months, which advance must be felt in all consuming countries. These facts, beside stimulating prices in the United States, remove still farther all possibility of foreign competition.

FLOUR MILL DIRECTORY FOR 1886.

All persons desiring to reach the milling trade should invest at once in a copy of Cawker's American Flour Mill Directory for 1886. It is carefully compiled; contains 18,289 addresses in the United States and Canada; shows in thousands of instances the capacity, power and system of milling (i. e. whether the stone or roller or combined system is used). It also contains a list of millwrights and American and European flour brokers. The book is sold at \$10 per copy and can be obtained by addressing the United States Miller, Milwaukee, Wis., or any of the

A WORD TO SALESMEN.

From our point of observation we believe the essential point with a salesman is to be truthful. Misrepresentation of any kind will prove fatal in the long run. Good, square, honorable treatment is absolutely necessary to keep trade. A certain degree of faith is absolutely essential in trade, and when it is

once lost the inevitable consequence will be that the customer will stop dealing with the one by whom he feels that he has once been cheated. A salesman should take as thorough an interest in the business as if it were his own. He should take special pains to learn everything possible about the articles he tries to dispose of. Industrious young men, whose minds are on their business, possessed of average ability, are pretty sure of reasonable success. There is always room in the front ranks for all who have the energy to get to them.

MILWAUKEE ITEMS.

DURING the last fiscal year the Milwaukee post-office handled 71,151,679 pieces of mail matter.

THE spur track from the mills of E. Sanderson & Co. to the railway track on the opposite side of Commerce Street has been completed. All the mills on Commerce St. have now the best of railway as well as water transportation facilities. The roadway between the tracks is now paved with granite blocks.

ASMUTH & Co. have commenced the erection of a malt house on Florida Street, south of the Davis Boiler Works, that will be one of the largest in the city. The building will be 53x140 feet, five stories in height, of brick and iron, and will cost \$45,000. The house will have a capacity for malting 400,000 bushels annually. Birge & Smith of this city, do the work.

F. H. MAGDEBURG, president of The Gem Milling Co., Milwaukee, who has been on a visit to Europe, has returned.

C. K. REIFSNIDER, managing editor of the *St. Louis Miller*, recently favored us with a pleasant call.

MR. J. M. CASE, of the Case Mfg Co., Columbus, O., made us a call recently.

IN an interview, Angus Smith, the well-known grain elevator man, gives some interesting facts in connection with the controversy about extortionate elevator charges. In relation to the statement that the falling off in Milwaukee grain business is due to excessive railroad and elevator charges and the want of proper facilities for doing the business in Milwaukee, Mr. Smith said:

The railroads have increased their capacity ten times over since 1873, and have very largely reduced their transportation charges. The elevator facilities have been more than doubled and the charge is only three-quarters of a cent per bushel for handling, while in 1873 we received two cents per bushel. Still the cry of Mr. Bacon is for a further increase of storage capacity and further reduction of prices for storing grain. He tries to convince the public that the elevators are paying an enormous profit and illustrates it by saying that the storing of 4,000,000 bushels at 2½ cents would pay 15 per cent on the money invested in elevators in Milwaukee. Let us see. Two and a half cents per bushel on 4,000,000 bushels would give \$100,000 gross income. A low estimate of value of the elevators, grounds and docks would be \$2,000,000, and the interest on that at 6 per cent, \$120,000. The actual cost for running these elevators is not less than \$80,000. This shows that it is necessary to earn \$210,000 before there is any profit over and above a moderate interest on the money invested. I would like to see Mr. Bacon show some appreciation of what is necessary to bring the business back to Milwaukee by a reduction of his charges as a receiver and commission merchant, which remain the same as when we charged two cents for handling.

October 6, Angus Smith & Co. posted the subjoined notice:

The following list of receipts represents wheat that requires frequent handling to prevent becoming warm, and we fear beyond our power to prevent actual damage, and this is to notify the owners of wheat represented by the receipts above named that we will not be hereafter responsible for its condition. We will make a charge of ½ per cent. per bushel for handling over and airing the same as often as it is handled. And, further, that we will pay the owners of this wheat 2 cents per bushel on any part or all that they will remove from the elevators within the next five days. This list includes all our receipts out dated prior to 1886, and is about 252,000 bushels. All other wheat in our warehouses has been taken into store in 1886.

FOREIGN ITEMS.

Great damage has been caused by floods in the Argentine Republic to grain and stock.

English and Continental milling engineers are commencing to complain of dull times.

The eighth annual report of the British and Irish Millers Association has recently been distributed. It is a volume of 185 pages, containing a full report of the Dublin convention and other matters of importance.

Messrs. Higginbottom & Stuart, English milling engineers, say that the American "Short" system, recently so much talked of, is nothing new; that they have built mills on that system, one of which has been working two years, doing very good work. They find the best results, however, where disks are used for the breaks.

The French millers are about to organize a National Association of Millers.

A considerable number of roller mills have been erected in France during the past year by English builders. A large quantity of American milling machinery has been used.

Mr. H. Lloyd Snapes has started a technical school in Manchester, England, in which a specialty is made of teaching the chemistry of wheat, flour and bread.

The electric light is being placed in a great number of European mills. It is undoubtedly, when properly arranged, the safest light for a flour mill.

An English firm has received an order for a 125 bbl. roller mill to be erected in the Orange Free State, South Africa.

The *Sydney Morning Herald* estimates that New South Wales will require 89,500 tons of wheat; Queensland, 20,000 tons, and Tasmania, 5,000 tons, between this and the end of the year, and that this will absorb the present estimated surpluses of South Australia and Victoria (17,500 tons) and thus the colonies will be obliged to import 97,000 tons from abroad, New Zealand having already over-exported. Victoria, however, now appears to be out of the field as a source of supply. Indian wheat is not looked for with favor in Australia, and it seems probable that California will be called upon to make good any deficit there may be.

MONTREAL'S EXPORT BUSINESS. — The amount of grain carried from the west to Montreal for export this year has largely exceeded the quantities of the last three years. The Montreal Transportation Company, naturally enough, desires the government to free the St. Lawrence canals. If this were done, President McLennan says, and the channel of the river deepened in certain

places, "the St. Lawrence route would command not only the carrying trade of Canada, but of the western states as well." Much more important, however, is the prospect of direct rail connection with Minneapolis. A short route, via the Minneapolis, Sault Ste. Marie & Atlantic and Canadian Pacific roads, is assured, and it is just now reported that the Grand Trunk is likewise about to reach out for a northwest connection by means of a line from Gravenhurst along the northern shore of Georgian bay to Sault Ste. Marie. The distance from Minneapolis to Montreal by the Canadian Pacific route is stated at 1,090 miles, or 250 less than from Minneapolis to New York via Chicago.—*Bradstreets*.

A communication from U. S. Consular Agent, A. C. McDowall at Piræus, Greece, says:

There are thirteen steam flour-mills in Piræus. Two of these are on the roller system, but have proved too large and too expensive for their owners, who have failed, and the mills are consequently standing idle. The other eleven mills have an aggregate of 55 pairs of stones, the largest having 12 pairs, and the smallest 3 pairs.

Consequent upon the number of small steam mills erected in the provinces and islands of late, the large mills in Piræus are suffering from want of trade, and lately four mill owners have failed, their mills being sold to pay mortgages, but no one came forward as buyers, so they remain in the hands of the banks which had advanced the money to build them. These mills are all standing idle.

The machinery in these mills is pretty equally divided between English, French, German, and that made in local workshops. The only American machine used in these mills is the "Eureka" grain-cleaner. These are imported through Liverpool and London, England.

Flour-milling, like most other industries here, has been overdone, so that most of the large and expensively got up mills that have not already failed find it difficult to keep running, there being no sale for their flour.

Stone-dressers' wages run from \$30 to \$50 per month, and ordinary hands about mills get from \$10 to \$15 per month.

Russia is going to have a railroad tunnel three miles long, at a cost of \$3,500,000. She has 15,000 miles of railway, but her only tunnel is 700 yards long. More great works of this kind are contemplated, and as Russian engineers are ignorant of tunnel making there is a demand for foreign skill.

The passage of the Suez Canal is ordinarily made in thirty-six to forty hours, but vessels fitted with the electric-light apparatus can go through in sixteen hours.

Dynamite has been used for driving piles in Pesth. A cast-iron plate is put on top of the pile and a charge of seventeen and a half ounces of dynamite exploded on it. The effect is equal to five blows of a pile engine having a weight of fourteen and three-quarter Vienna cwt. and a stroke of ten feet.

Even Patagonia, South America, is to have a railway, a vessel being now on its way from England with rails and other material for the new road, which is to be built at the Welsh colony of Chubut, in that portion of Patagonia belonging to the Argentine Republic.

ITEMS OF INTEREST.

A CURIOUS OPTICAL ILLUSION.—M. de Parville has called the attention of the French Academy of Sciences to a curious illusion of the vision which may account for

the apparent oscillation or swinging of stars sometimes observed, and called by the Germans *Sternschwanken*. When the eye looks for some time at a small feebly lighted body, itself being in complete darkness, the body appears to oscillate or describe certain curves. It is a phenomenon of the subjective order; and appears to be of the same nature as the movement of a star observed when a person leans the head against a wall, and fixes his eye upon the star. The star appears to be agitated in its place and to oscillate rapidly. In order that the motion may be noticed there should be no moon, and the sky should be clear. A lunette takes away the apparent motion.

THE St. Louis *Railway Register* says: "When the people on the Pacific Coast learn to use elevators instead of sacking their grain, they will reap a larger profit. The construction of elevators in Oregon and Washington must soon be followed by similar construction through California."

SHINING BLACK INK.—The best shining black ink, used for mourning paper, and the manufacture of which has up to the present time been kept a secret by the makers, may be prepared, according to the *Papier Zeitung*, of lamp-black, borax and shellac. The ink is made as follows: In one liter of hot water sixty grains of borax are dissolved, and to this solution three times the quantity of shellac is added. After this mixture has been properly dissolved, the necessary quantity of lamp-black is added, the whole being constantly stirred. Should the luster not be satisfactory, more shellac is added.

AN ENGLISH MILLWRIGHT'S BOYHOOD.—Smeaton, the great mechanic, when a boy, disdained the ordinary playthings of boyhood. He collected the tools of workmen and bothered them with questions. One day, after having watched some millwrights, he was discovered, to the great distress of his family, in a situation of extreme danger, fixing a windmill on the top of the barn. His father sent him to London to study law, but he declared that law did not suit the bent of his genius, and addressed a memorial to his father to show his utter incompetency for legal pursuits. His father finally allowed him to do as he wished, and he became one of the foremost of English millwrights.—*Mechanical Progress*.

It is estimated that the wheat crop of California will be worth \$54,000,000 this year, as against \$28,000,000 last year; and that the barley crop will fetch \$16,000,000, a gain of \$7,000,000 over last year. The area sown is said to be but a fraction larger than in 1885. Recent estimates place the wine crop at \$18,000,000, instead of the \$25,000,000 estimated earlier in the season. Last year's crop was \$15,000,000.

THE regular life insurance companies in the United States have assets amounting to \$523,664,678. In 1885 their income from all sources was \$105,000,000; and during that year they paid out for death claims alone \$23,194,000. Large disbursements were also made for surrendered policies and in paying matured endowments and dividends.

ONE HUNDRED and five thousand nine hundred and eighty-two persons are employed in the breweries and distilleries of the United States. They earn in wages each month about \$12,250,000.

THE FLY FISHERMAN.

And now the Boston fisherman
His tackle getteth out,
And goeth down to distant Maine
To woo the fleckle trout.

He hireth him a stalwart guide
His camping kit to lug,
And takes a heap of grub along
With something in a jug.

Within the light birch-bark canoe
The guide doth take him out,
His fly he casteth skillfully,
And soon you hear him shout:

"By jinks! old man, how'll this trout do
To send home to the Hub?"
The guide responded with a sigh:
"You've got a two-pound chub."

But soon the speckled beauties rise,
And he has lots of sport,
And goes back home bawling that
The two weeks were so short.

And since in camp on balsam boughs
He lies and sleeps his fill,
Is it not strange when he comes home
He keeps on lying still?

—"Sarkastic" Boston Ex.

SIMON W. SPERRY, of the firm of Sperry & Co., Stockton, Cal., died of heart disease at his home, Sept. 13, aged 64 years. He had been a resident of Stockton since 1856 and continuously engaged in the milling business. The corporation of Sperry & Co. was formed about two years ago, with S. W. Sperry as President, his three sons being associated with him in the business. Mr. Sperry was the controlling spirit of the firm until about a year ago, when his health broke down, since which time he has traveled considerably in an endeavor to conquer his disease, but steadily failed until, after great suffering death came to his relief. Mr. Sperry is very highly spoken of by all who knew him. The Stockton city council in a series of resolutions of regret, said: "By his death this city has lost one of its most valued and upright citizens, and the business interests of Stockton will long suffer from his death." He leaves a wife, two daughters and three sons.

LEGAL DECISIONS FROM BRADSTREETS'.

FAILURE TO TRANSMIT TELEGRAPH MESSAGE—RECOVERY—PROOF.—In the case of Western Union Telegraph Company vs. Brown the Supreme Court of Indiana held that in an action to recover a penalty for failing to transmit a telegraph message it was necessary for the plaintiff to show affirmatively that he was the sender of the message.

GRANT OF WATER-POWER—RESERVATION.—A grant of a right to build a mill and the privilege to draw and use the water from a mill-pond, the grantor reserving the right "to the use of sufficient water from said pond to carry a fulling mill and three breast wheels," was construed as not restricting the grantor to the use of breast wheels, but as limiting him to the quantity of water sufficient to carry three breast wheels. Coburn vs. Middlesex, decided by the Supreme Judicial Court of Massachusetts.

A TWO CENT STAMP

Sent with your full address to A. V. H. Carpenter, General Passenger Agent, Milwaukee, Wis., will bring you ONE of the following named publications, issued for free distribution by the Chicago, Milwaukee & St. Paul Railway:

Gems of the Northwest.
A Tale of Ten Cities.
Uncle Sam's Journey.
Guide to Summer Homes.
The Overland Journey.
The Northwest and Far West.
Plain Facts about Dakota.

All of these publications are finely illustrated and contain valuable information which can be obtained in no other way.

THE OLD MILL.

Here from the brow of the hill I look
Through a lattice of boughs and leaves
On the old gray mill, with its gambrel roof,
And the moss on its rotting eaves,
I hear the clatter that jars its walls,
And the rushing waters sound;
And I see the black floats rise and fall
As the wheel goes slowly round.

I rode there often when I was young,
With my grist on the horse before,
And talked with Nellie, the miller's girl,
As I waited my turn at the door.
And while she tossed her ringlets brown,
And flirted and chatted so free,
The wheel might stop or the wheel might go—
It was all the same to me.

'Tis twenty years since last I stood
On the spot where I stand to-day,
And Nelly is wed and the miller is dead,
And the mill and I are gray.
But both, till we fall into ruin and wreck,
To our fortune of toil are bound,
And the man goes and the stream flows,
And the wheel moves slowly round.

—Thomas Dunn English.

We will send the U. S. Miller and American Miller for one year for \$1.50.

LIEBIG ON THE BEST PROCESS FOR MAKING BREAD.

BY W. A. THOMS.

The "Letters on Chemistry" of Liebig are a mine of wealth to the student of bread-making; that is, if the student has already a little knowledge, and after reading is prepared to select his facts from reason and experiment and not from faith. Liebig says of fermentation, "We recognize no other cause than the decomposition of a sulphur and nitrogen compounds." This view is now altogether abandoned, and the credit for this is due to Pasteur. Fermentation is due to vital organisms satisfying their necessities from the organic matter in the medium where they are functioning. The organism, or yeast cells, first change the organic matter, so that it can pass through their cellulose skins to the interior; it is there in the inside of the cells that true fermentation takes place, and is, first, a splitting up of compounds for the assimilation of a part; and, second, the expulsion of the rest as carbonic acid, alcohol and waste cell-products. These processes are the reverse of decomposition—they are the building up of organism rather than the breaking down, beyond the ordinary breaking down accompanying all vitality. The cells ferment in order to live and multiply, just as we breathe and take in food in order to do the same. Indeed, there is a very close analogy between what takes place in our own bodies and what takes place in a ferment tub. But it was not to explain unicellular and multi-cellular physiology, even if able, that I began this, but to give a few notes from Liebig's "Chemistry." The book is out of print and difficult to get, yet it contains much that is of great value to bakers.

"Many chemists are of opinion that flour, by the fermentation in the dough, loses somewhat of its nutritious constituents, from a decomposition of the gluten; and it has been proposed to render the dough porous without fermentation, by means of substances which, when brought into contact, yield carbonic acid. But on a closer investigation of the process, this view appears to have little foundation.

"When flour is made into dough with water, and allowed to stand at a gentle warmth, a change takes place in the gluten of the dough, similar to that which occurs after the steeping of barley, in the commencement of germination in the seeds, in the preparation of malt; and in consequence of this change, the starch (the greater part of it in malting, in dough only a small percentage) is converted into sugar. A small portion of the gluten passes into the soluble state, in which it acquires the properties of albumen, but by this change it loses nothing whatever of its digestibility or of its nutritive value.

"We cannot bring flour and water together without the formation of sugar from the starch, and it is this sugar and not the gluten, of which a part enters into the fermentation, and is resolved into alcohol and carbonic acid.

"We know that malt is not inferior in nutritive power to barley from which it is derived, although the gluten contained in it has undergone a much more profound alteration than that of flour in the dough and experience has taught us, that in distilleries where spirits are made from potatoes, the plastic constituents of the potatoes and of the malt which is added, after having gone through the entire course of the processes of the formation, and the fermentation of the sugar have lost little or nothing of their nutritive value. It is certain, therefore, that in the making of bread there is no loss of gluten. Only a small part of the starch of the flour is consumed in the production of sugar, and the fermentative process is not only the simplest and best, but also the cheapest of all the methods which have been recommended for rendering bread porous. Besides, chemical preparations ought never, as a general rule, to be recommended by chemists for culinary purposes,—since they hardly ever are found pure in ordinary commerce. For example, the commercial crude muriatic acid, which it is recommended to add to the dough along with bicarbonate of soda, is always most impure, and often contains arsenic, so that the chemist never uses it, without a tedious process of purification for his purposes, which are of far less importance," than making bread light and porous.

On the use of potatoes Liebig has this to say, "To make bread cheaper it has been proposed to add to dough, potato starch or dextrine, rice, the pressed pulp of turnips, pressed raw potatoes, or boiled potatoes; but all these additions only diminish the nutritive value of bread. Potato starch, dextrine, or the pressed pulp of turnips and beet-root, when added to flour, yield a mixture, the nutritive value of which is equal to that of the entire potato or lower still, but no one can consider the change of grain or flour into a food of equal value with potatoes or rice an improvement. The true problem is to render the potatoes or rice similar or equal to wheat in their effects, and not *vice versa*. It is better under all circumstances to boil the potatoes and eat them as such, than to add potatoes or potato starch to flour before it is made into bread, which should be strictly prohibited by police regulation, on account of the cheating to which it would inevitably give rise."

I agree with Liebig in this. Potatoes in bread are unnecessary, are a fraud and should be regarded in law as such. Pure bread should consist of wheaten flour, water, yeast

and salt, how much water I do not undertake to say, but am prepared to keep within the percentage when authorities have fixed them. —British Confectioner and Baker (London).

PLEASANT PARAGRAPHS.

WITH money, come poor relations; with property, taxes; with the winter, pneumonia; and with the summer, cholera and base ball. —Peoria Journal.

"WHAT do you go to Florida for, Denims?" "Well, we have a variety of reasons. The girls go for the orange groves, wife goes for her lungs, the boys go for the alligator-shooting, and I go for about \$950 for the season."

THE Irish patriots should not be so discouraged. Married men have struggled for home rule for twenty centuries, and have not yet succeeded in getting it.

A GRINDSTONE, says an agricultural contemporary, is one of the worst used implements on the farm. The other is the boy who has to turn the blasted thing.

"MAMMA," she said, "I don't like the way this bustle sets."

"Neither do I," was the prompt reply. "And, besides, your father is swearing about the rat-trap being lost, so you must really take it off."

MOTHER—You naughty boy if you keep on this way you'll never go to heaven. Naughty boy (after a whipping)—Bo-ho! I don't want to go if angels wear golden slippers. Leather ones are hard enough for me—bo-ho!

"DID you ever see anything like this?" said a young lady at a church fair, when raffling was in progress. "Only once" replied he. "When was that, dear?" "Once on a train out west, when it was robbed by bandits," was the gentle response.

"THERE's mighty few troubles us men have that a woman isn't at the bottom of," said a precocious small boy, after his mother had punished him by sending him to bed without his supper.

THE inhabitants of the South Sea Islands never bury their dead, they lay them out on a high platform supported by poles. Thus it would be wholly impossible for a South Sea Islander to drop a tear on his angel mother's grave. He would have to throw it up.

A PHILADELPHIA gentleman, after being shown about Boston by a citizen of the Hub, said to his cicerone: "Boston isn't laid out so well as Philadelphia." "No," replied the latter, "but it will be when it is as dead."

A BEAUTIFUL woman, with artificially heightened color, once said to Gen. Shields: "How is it that, having obtained so much glory, you will seek for more?" Ah, madam," he said with more force than politeness, "how is it that you, who have so much beauty, should still put on paint?"

"PA," said little Jack Jinson, who always had his ears open, but sometimes got things slightly mixed, "does a 'whisker cocktail' make your mustache grow?" "No, my son; it makes your hair curl," was the solemn response.

A YOUNG man generally falls in love with a woman five or ten years older than himself. This is his first experience. But when he gets to be between 45 and 50 he evens up by trying to make himself believe that all the young women are dead in love with him.

Mott street Sunday-school teacher (to Wun Lung, a new recruit): "Do you understand, Wun Lung, the beautiful song we have just finished, 'Where, O where, are the Hebrew children?' Wun Lung: Yep, me undtstand." Teacher: "Where are the Hebrew children?" Wun Lung: "Heblew children down on Blaxter stleet."

MOODY never neglected any opportunity in preaching. He went into the city to insure his life. Having done so, he said: I have insured my wretched body, but who is to insure my miserable soul?" A matter-of-fact clerk answered: "Our Mr. Thompson, of the fire department, will see after that."

"LAMBIE DEAR," "Yes, dovey darling," "Is he going down to the horrid club to-night, duckie?" "Yes, ownest ownie." "No, to-nightie." "Yessie." "No, sweetie." "Yes, dearie." "Bet him a dollar, lovey." "Why ain't I, birdie?" "Because, sugar plum, as you go out into the front hall you'll see mamma, my own dear mamma, who dotes on you, sitting on a trunk; she's just arrived. Won't you please stay home, sweetie?" He stayed.

THEY had just been married. He seized her hand and said in a low, tremulous voice: "It was your innate modesty and apparent indifference, dearest Sallie, that made me register a vow to marry you at all hazards." "Yes," she sighed, "but I slipped up on three or four of the most eligible young men in Austin before I found that the only way to rope in a galoot was to come the innate modesty and total indifference racket on him."

IN court: "What pretext did your husband have for beating you?" "It wa-n't a pretext, your honor, it was a club."—*Burlington Free Press.*

FOGG—What are you doing now? Boggs—I am now on the boards. Fogg—What! Acting! Boggs—No; driving a lumber wagon.—*The Rambler.*

"WHAT a delightful existence it is, Farmer Robinson," said his city guest, "out here in the country. How crisp and beautiful the air, and the fragrance of new mown hay pervades all. I should think you would feel like chanting psalms of praise to the Creator the year 'round." "It is sort o' nice, miss I giant. But I never feel quite as much like thanking heaven as I do when I've scrimmaged about an' got money enough together to pay the taxes."

GERMAN BULLS.—The Irish have not got a monopoly for the manufacture of bulls. The German papers abound in them. Here are a few specimen bricks:

"After the door was closed a soft, female footstep slipped into the room, and with her own hand extinguished the taper."

"Both doctors were unable to restore the deceased once more to life and health."

"A man living at Freudenstadt tried to shoot his wife, but missed her, for which offense he was promptly locked up."

"The chariot of revolution is rolling onward and gnashing its teeth as it rolls," was what a revolutionary leader told the Vienna students in 1843 in his speech.

"The Ladies' Benevolent Association has distributed 20 pairs of shoes which will dry up many tears."

"I was sitting at the table enjoying a cup of coffee when a gentle voice tapped me on the shoulder. I looked around and saw my old friend."

"Among the emigrants was an old blind woman who came to America to see her only son once more before she died."—*Texas Siftings.*

"Gentlemen of the jury," said an Irish barrister, "It will be for you to say whether this defendant shall be allowed to come into court with unblushing footsteps, with the cloak of hypocrisy in his mouth, and draw three bullocks out of my client's pocket with impunity."

"TRADE must be rushing," he said as he halted and pointed to a half dozen boxes of clothing on the sidewalk ready to be shipped.

"On der contrary, trade vhas werry poor," answered Moses.

"But you are shipping lots of goods."

"Oh, dose goods vhas going to mine brudder Shacob in Cincinnati. I got my insurance on stock two days ago, and now it vhas his turn. When he gets his insurance he ships them to Abraham in Chicago. Trade vhas poor—very poor."

"Jimmy, what's a clearin house?" asked one street laborer of another as he leaned wearily on his broom waiting for a reply.

"I'm not exactly on to it" was the reply. "It can't be a sugar refinery?"

"I think not. I think I had a bad case of it once, myself, but I may not be right. I put a little mortgage on my place, and when it came due that fellow cleared me of the house so fast that we entirely forgot one of the children and had to go back for him."

USEFUL RECIPES.

A VERY good cement to fasten on lamp tops is melted alum. Use as soon as melted, and the lamp is ready for use as soon as the cement is cold.

REMEDIES FOR BURNS.—Cover the burn thickly with vaseline, and dust plenty of corn starch over it. If you have no vaseline, use linseed or sweet oil, or warm mutton tallow; and if you haven't corn-starch, substitute wheat flour. Wrap in a soft linen or cotton cloth. Don't break the blisters, or disturb the burn except to put on more vaseline and corn-starch, until the soreness is entirely gone. Then wash and dry it, rubbing with glycerine to make the new skin less tender and more firm. The air must be kept from a burn. The oil and flour accomplish this, and form a soothing, healing paste or salve.

Every family should have a preparation of flaxseed oil, chalk and vinegar, about the consistency of thick paint, constantly on hand for burns and scalds. The best application in cases of burns and scalds is a mixture of one part of carbolic acid to eight parts of olive oil. Lint or linen rags are to be saturated in the lotion, and spread smoothly over the burned part, which should then be covered with oil silk or gutta-percha tissue to exclude air.

A GOOD paint for sheet iron is made as follows: Good varnish, one-half gallon; boiled linseed oil, one-half gallon; add red lead sufficient to bring to the consistency of common paint. Apply with a brush. Applicable to any kind of iron work exposed to weather.

BURNT COFFEE FOR WOUNDS—Dr. Oppler, of Strasburg, has discovered in burnt coffee

a new antiseptic dressing for wounds. The action appears to be two-fold; first, that produced by burnt coffee as a form of charcoal, and secondly, that which is due to the pungent aromatic odors, which are fatal to the lower organisms. As coffee is always on hand in military expeditions, it will be especially serviceable as a dressing during war times.

FIRES resulting from burning oil are extinguishable with water, but may readily be smothered by throwing flour on the burning oil. If clothing be set on fire by spilling oil or by the bursting of a lamp, a handful of flour thrown on immediately may be the means of quenching the flames and thus saving life.

TO MELT old rubber, such as old rubber car springs, scraps, etc., so as to be able to run it into molds for new work: Heat the india rubber with steam; the sulphur then discharges, and india rubber melts, runs into the hot water and collects at the bottom of the pot, while the vapor prevents it burning. The properties of the india rubber are thus sensibly modified; it becomes a blackish mass, liquid at the ordinary temperature, but drying in the air, and becoming then impervious to water. The material loses its elasticity, but is suitable for the preparation of gums or special varnishes for certain articles.

SYMPATHETIC INK.—An ordinary solution of gum camphor in whisky is said to be a permanent and excellent sympathetic ink. The writing must be done very rapidly, as the first letters of a word have disappeared by the time the last are written. Dipping the paper in water brings it out distinctly, and it becomes invisible again when the paper is dried. It can be brought out repeatedly without affecting its vividness.

A SENSIBLE PARAGRAPH.

The *Manufacturers' Gazette* of Boston is now stuck on Edwin Atkinson's economic wisdom. It says of his recent attempt to demonstrate how cheaply life can be sustained in this country: "The economists who are helping to solve the labor issues by demonstrating that a 'well-conditioned life can be lived in Boston for \$172 a year,' and that a yearly income of \$500 will comfortably care for a family of six, are feeding the flames of communism. On this theory nine per cent of the \$700,000,000 of Boston's valuation would lift every soul in its 370,000 people to a life of luxury. And if such a small, widespread contribution would abolish the blighting poverty that abounds in our streets, there is really no humanitarian reason why the dividend and distribution should not be made. It is to be regretted that men of business and social prominence, and papers of large support, father such nonsense. The man living on such an income would be continuously clothed in rags, and his children be tabooed from schools, churches, libraries and places of enjoyment. A manufacturer who expected to average his labor at fifty-five cents a day would be publicly flayed. It is very well for men enjoying a \$10,000 salary, with an income of \$2,000 or more for disseminating political economies, to write what others can do, but let the leader in this doctrine come down to the level of his philosophy, and let us have a living example of a \$172 existence."

SONG OF THE ANTI-SALOONIST.

I.
Most of us have a failing or two
We'd like to hide from all others.
Which is the course we'd better pursue
Is the only thing that bothers.
But there is a way, if you will but see—
Society, you can scorn her—
Excuse yourself; take carefully
A quiet drink in the corner.

II.
You wake in the morning feeling queer;
The dear wife's bound to be thinking,
If rather thirsty you should appear,
Last night you were out a drinking,
Put into your shoe a little flask,
Where you put your shoes, don't warn her,
Then take—she will no questions ask—
A quiet drink in the corner.

III.
We know that many who prudish seem
Don't need their faults to be telling;
And thousands there are who'd never dream
Their sins out loud to be yelling.
But it is no sin to carefully act
Or there'd be many a mourner.
Be satisfied to take with tact
A quiet drink in the corner.

IV.
So never drink at a public bar;
Some one might say: "What was it?"
You'll find it better to keep, by far,
A bottle in the closet.
No one can charge you with being then
A sly political fawner;
It will not influence votes or men,
A quiet drink in the corner.
(Nat Childs, in the Boston News.)

NEWS.

GEISS & GIBBS, of Salina, Kan., have dissolved.
GEO. A. KLINGER, miller at St. Charles, Mo., is dead.
COLE & RUTLEDGE, of Conway, Dak., have dissolved.

A STEAM flouring mill has been completed at Neas City, Kan.

A STEAM flouring mill is being built at Melrose, O., by J. A. Boyd.

SARGENT & Co. millers at Centalla, Wash. Ter., have sold out.

A STORM, Sept. 24, blew down Woodward's flour mill at Urbano, O.

A 30-BARREL mill is being built by A. & E. Copley, at Antwerp, N. Y.

J. C. RODGERS is building a 60-barrel roller mill at Campbellsburg, Ky.

J. I. CLAYTON has completed a 75 barrel full roller mill at Logansport, Ind.

It is rumored that a new 1,000 bbl. mill is to be built at Nashville, Tenn.

A STEAM roller mill will soon be erected at Ebensburg, Pa., by Glenn & Driggs.

THE roller mill at Bennington, Kan., has started up. It has a capacity of 100 barrels.

THE Rogers Milling Co., of Rogers, Ark., are building a 75-barrel steam roller mill.

THE Abilene Steam Mill, at Denton, Tex., has started up. Capacity 150 barrels per day.

AT Oakland, Iowa, Hancock's grain elevator was burned. Loss on building, \$6,000.

LEAK & SMITH have built and put in operation a 75-barrel roller mill at Franklin, Ky.

A STEAM flour and feed mill is being built by Decker & Hann at Swedesboro, N. J.

THE Wharton Flouring Mill at Birmingham, Ala., are now completed and in operation.

J. W. PICKLE succeeds Pickle & Cameron in the Cambridge Roller Mills at Cambridge, Neb.

THE flour mill of Keyns & Wellman, at Logan, O., recently destroyed by fire, will be rebuilt.

THE Birmingham Warehouse, Mill and Elevator Co. has been incorporated at Birmingham, Ala.

AT Kenton, Tenn., the flouring mill of W. J. Mathes was destroyed by fire, Aug. 23. Loss, \$7,000.

SWANSON & FORSBLOM, of Hydestown, Pa., will rebuild their mill recently destroyed by fire.

AT West's Mills, N. C., the flour mill owned by P. P. McLain, was recently burned. Loss, \$8,000.

THE Iowa Mill & Elevator Co. has been incorporated at Indianapolis, Ia., with a capital stock of \$60,000.

THE Florence Milling Co., with a capital stock of \$50,000, has been incorporated at N. Y. city.

THE Spokane Mill Co. has been incorporated at Spokane Falls, W. T., with a capital stock of \$250,000.

AT Spencerport, N. Y., Blackwell's flouring mill was destroyed by fire. Loss, \$6,000; insurance, \$5,000.

M. E. BURKE & Co., millers at Mount Victory, O., were burned out Sept. 9. Loss \$15,000; insurance \$4,000.

A STEAMER in Baltimore was recently loaded with 88,000 bushels of wheat in six hours and forty minutes.

THE Northwestern Elevator & Mill Co. has been incorporated at Toledo, O., with a capital stock of \$350,000.

THE new Farmers Alliance Mill at Denton, T. x., which started up Sept. 15, has a capacity of 150 barrels per day.

C. H. NUTTER & BROTHER, millers at Brighton, Ill., have made an assignment. The mill was valued at about \$10,000.

RUTHERFORD & TOOMBS, of Stonewall, Man., ask for a bonus of \$4,000 to assist them in establishing a roller flour mill.

A MILL building at Latham, Kan., owned by S. T. Morgan, is awaiting machinery, which is being negotiated for.

AN oat-meal mill is about to be started at Fergus Falls, Minn., by John Valentine, with an invested capital of \$8,000.

THE Ogilvie Milling Co. and the Portage Milling Co. have commenced buying wheat at the Portage. No. 1 hard started at 57c.

A \$10,000 BONUS is offered by the people about Santa Ana, Tex., for the erection of a first-class roller mill at that place.

A 150-BARREL roller mill is to be built at Oxford, Mich., by the Craig Wheat Cleaner Co., of Detroit, Mich., at a cost of \$20,000.

THE municipality of Wolseley, Assiniboia, offers a bonus of \$6,000 for the erection of a 75-barrel mill and 20,000 bushel elevator.

THE Bridgewater Mills at Fredericksburg, Va., have been purchased by Charles Tyler of Baltimore, Md., who will make improvements.

THE Clark-Warder Co., of Glasgow, Ky., are about to adopt the roller system, and have contracted for machinery for a 100-barrel mill.

\$1,500 WILL be paid, as a bonus, to any party who will build and keep in operation a 50-barrel mill at Wisner, Neb., by the merchants of that place.

CHAS. F. SMITH, Henry T. Smith and E. B. McCann have incorporated under the style of The Monticello Milling Co., at Chicago, Ill. Capital stock, \$15,000.

SAMUEL F. CHENOT, Nelson G. Ziebold and Geo. W. Ziebold constitute the incorporated firm, The Waterloo Milling Co., of Waterloo, Ill. Capital stock, \$25,000.

A FINE roller mill of 100 barrel capacity is being built at Alvarado, Tex., by the Alvarado Roller Mill & Elevator Co., who expect to have it in operation Oct. 15.

THE Kearney Milling Co., of Kearney, Neb., are building a steam roller mill, with a capacity of 150 barrels, to replace the Tillson mills recently destroyed by fire.

THE Crescent mill at Eau Claire, Wis., has been purchased by the Eau Claire Roller Mill Co., which has been lately organized at that place. The price paid was \$25,000.

JOSEPH LOBRANO, an employe in the Crescent Rice Mill, New Orleans, was on Sept. 22 caught by a belt and thrown against some machinery, quite severely injuring him.

THE firm of Joseph & Anderson, millers at Montgomery, Ala., will hereafter be known as the Montgomery Mill Co., a company having been incorporated under that name.

THE four mills of Jones & Ellis, on Walnut Creek, near Raleigh, N. C., were swept away by the water on Sept. 9. The flood was caused by the breaking of

Yates' dam. Loss, \$4,250. Farnman's mill, further down the river, was also destroyed, causing a loss of \$8,000.

AT Austin, Tex., the Harris County Mills were chartered, Sept. 20, with a capital stock of \$50,000. The incorporators are D. P. Shepherd, M. C. Willborn and R. Lockhart.

THE Hawesville Roller Mill Co., of Hawesville, Ky., have purchased the burr flour mill of Shelby & Co., and have refitted it to the roller system, with a daily capacity of 50 bbls.

THE Winnipeg (Man.) Commercial says: The new elevator in connection with the Hudson's Bay Co.'s flour mill in Winnipeg, will be completed October 1. The capacity will be 50,000 bushels.

C. W. HOWARD, of Neenah, Wis., will build a 300-barrel mill on his fine water power at that place, at an estimated cost of from \$25,000 to \$30,000. The mill will be of brick and four stories high.

THE Springfield Mill Co., is the name of a newly organized firm at Springfield, Tenn., who have purchased an old mill at that place which they are refitting with new roller process machinery.

ON THE night of Sept. 18 the Hunt mill at Richmond, Ind., was burned. It was owned by the First National Bank and was one of the oldest in the State, having been built about 1824. Loss \$7,000; insurance \$4,500.

A NEW flour mill is in contemplation at Fergus Falls, Minn., and a considerable amount of stock has already been subscribed for. It is proposed to have a building 40x40, four stories high, with a capacity of 100 barrels.

THE farmers in the neighborhood of Charlestown, Ind., have organized a union and propose to build a mill for their own convenience. This is in consequence of the Millers' Union of that place having raised the toll for grinding wheat.

AT Greenville, Tex., Sept. 30, the flouring-mill and cotton-gin of Henry Wall, situated in the western portion of the town, was totally destroyed by fire. The fire is supposed to have originated from the boiler. Loss, \$8,000; no insurance.

W. ROBINSON, the Duluth representative of C. C. Wolcott & Co., has just been elected general manager of the Minneapolis and Pacific elevator line, a new institution on the new Minneapolis & Pacific road. The company will have about twenty-five houses.

RAPID CITY will vote on a bonus by-law to grant \$3,000 to aid Geo. McCulloch in the erection of a flour mill and woolen factory in that place. The municipality of Saskatchewan, within whose limits the corporation of Rapid City is located, has already voted a bonus of \$10,000 to this enterprise.

THE largest saw mill in the world was destroyed by fire Sept. 18, at Chippewa Falls, Wis. It was owned and operated by the Chippewa Lumber and Boom Co. The company employed about 1,200 men. The annual capacity was 65,000,000 feet of lumber, 16,000,000 laths and 16,000,000 shingle.

SMITH, who undertook to build a flour mill at Shoal Lake Station, Man., with the aid of a bonus, has, it is said, thrown up the undertaking. The municipality offer a bonus of \$5,000 to aid in the erection of a mill and elevator, and communications from parties who are willing to undertake the same are desired.

WORK began Sept. 21, on the consort warehouse to Elevator Q by the St. Paul and Duluth Elevator company, at Duluth. The warehouse will be just in the rear of Q, and wheat will be handled through that elevator by means of belts, as in other double elevators there. The capacity of the house will be 500,000 bushels. The house will be completed by Jan. 1 or so. It is probable also that two other elevators will be commenced there at an early date.

AMONG the recent engine orders of the Prospect Machine and Engine Co., Cleveland, O., are one of 575 horse-power, for the A. H. Hart Co. of New York city; one of the same size for the Mahoning Valley Iron Co., Youngstown, O.; one of 300 horse-power for the Bohn Manufacturing Co., St. Paul, Minn. Their reel trade is constantly on the increase, and they are also exceedingly busy in that department.

THE Nordyke & Marmon Co. have secured the contract for the erection of a 500-barrel steam roller mill for J. C. Firth, of Auckland, New Zealand. The Case Purifiers and the Milwaukee Dust Collector have been selected for this mill. English mill-builders had better look to their laurels in their own colonies.

PUBLICATIONS RECEIVED.

ST. NICHOLAS for October contains an engraving, by Closson, from George Washington, from a portrait by Gilbert Stuart; Edith Thomas contributes one of her best poems, "Autumn to Spring;" "Some Curious Mariners," by C. F. Holder, describes and illustrates insect methods of navigation; "The Crew of the Captain's Gig" is a charming story by Rev. Charles H. Talbot; Horace Scudder continues his delightful illustrated biography of George Washington, and E. S. Brooks gives a very readable account of "Old Time Armes and Armor."

THE CENTURY for October contains a very fine engraving of Bjornatjerne Bjornson, the Norwegian poet, with a delightful illustrated description of his home. Interesting articles are "Gloucester Fishers;" "American Explorers at Assos;" Common Schools Abroad," by Matthew Arnold. The war articles are "Corinth," by Gen. Rosecrans; "Stonewall Jackson's Last Battle," by Capt. J. P. Smith, and "Personal Reminiscences of Stonewall Jackson," by Margaret J. Preston. The illustrations in the Century are unusually fine.

A very handsomely illustrated catalogue from the WATERTOWN STEAM ENGINE CO., of Watertown, N. Y.

OGILVIE'S POPULAR READING.—We have just received a copy of Number Thirty-four of Ogilvie's Popular Reading, price, only 30 cents, sent by mail, post paid, on receipt of price, by J. S. Ogilvie & Co., Publishers, 31 Rose Street, New York.

POOR'S MANUAL OF RAILROADS FOR 1886.—We are in receipt of a copy of this valuable work which we find to be a whole encyclopedia of Railroad information. It is very neatly compiled and handsomely bound. From its pages it appears that 3,181 miles of railroad were constructed in the United States during 1885, and that at the year's close there were throughout the country 139,967 miles of railroad completed for traffic. The gross earnings of 123,110 mils of road, as reported, were \$765,310,519; operating expenses were \$498,831,526; leaving as net earnings \$266,478,993. There were other receipts amounting to \$68,393,477, and thus a total net revenue of \$335,872,470. From this were paid as interest on bonds \$179,181,223; other interest, \$6,571,848; dividends, \$17,672,106; and sundries, \$36,138,978; a total of \$350,064,252; leaving a balance of \$85,808,218, or about 3 1/2 per cent. of the entire capital of over \$3,500,000,000. If half the stock is water, the earnings upon the solid part amounted to about 7 per cent.

RECENT MILLING PATENTS.

The following list of Patents relating to milling interests, granted by the U. S. Patent Office during the past month, is specially reported by Stout & Underwood, Solicitors of Patents, 55 Wisconsin st., Milwaukee, Wis., who will send a copy of any patent named to any address for 50 cents:

Issue of September 7, 1886. No. 348,585—Grinding mill, G. and A. Raymond, Chicago, Ill.; No. 348,607—Grinding mill, H. A. Adams, Sandwich, Ill.; No. 348,637—Grinding disk for mills, G. & A. Raymond, Chicago, Ill.; No. 348,650—Grain drier, R. Welschbrook, New York, N. Y.; No. 348,836—Grain cleaning and scouring machine, M. Crawford, Chicago, Ill.; No. 348,890, grain cleaning machine, M. Crawford, Brooklyn, N. Y.

Issue of September 14, 1886. No. 349,155—Screw conveyor for grain, J. A. Gowans, Stratford, Canada; No. 349,233—Grain conveyor, J. Nelson, Titusville, Pa.; No. 349,235—Fanning mill, E. F. Reynolds, Bruce, Dak.

Issue of September 21, 1886. No. 349,390—Conveyor for grain &c., G. A. Gilbert and Ralph Wilcox, Milwaukee, Wis.; No. 349,418—Machine for hulling and grinding corn, J. U. Aebi and J. Muhlethaler, Burgdorf, Switzerland; No. 349,437—Grain scale, K. H. Schaper, Linn's Mill, Mo.; No. 349,628—Grinding mill, J. Burns, Brooklyn, N. Y.

Issue of September 28, 1886. No. 350,069—Dust Collector, W. Ince, Hayle, England; No. 350,084—Crushing and grinding mill, J. G. Kirker, Louisville, Ky.; No. 349,971—Grain weighing and registering apparatus, G. E. Baird, Urbana, Ill.

A PULLEY 63 feet in diameter and weighing 88 tons, has just been made in England. It has grooves for 32 ropes, which together will transmit 1,280 horse power; and the rim will have a velocity of more than a mile a minute.

"DON'T FEEL TOO BIG!"

A frog vas a singing von day, in der brook
(Id vas beddher, mine friends, you don'd feel too big!)

Und he shvelled mit pride, und he say, "Shust look,
Don't I sing dose peautiful songs like a book?"
(Id vas beddher, mine friends, you don'd feel too big!)

A fish came a-shvimming along dot vay
(Id vas beddher, mine friends, you don'd feel too big!)

"I'll dake you outd off der ve," he say;
Und der leedle froggie vas shetowd away.
(Id vas beddher, mine friends, you don'd feel too big!)

A hawk flew down, und der fish dook in
(Id vas beddher, mine friends, you don'd feel too big!)

Und der hawk he dink dot der shmardest vin
Ven he shtuk his claws in dot fish's shkin.
(Id vas beddher, mine friends, you don'd feel too big!)

A hunter vas outd mit his gun aroundt
(Id vas beddher, mine friends, you don'd feel too big!)

Und he say, ven der hawk vas brought to der groundt,

Und der fish und der little frog vas f undt.
"Id vas beddher, mine friends, you don'd feel too big!"

TO ADVERTISERS.

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It Took The Premium.

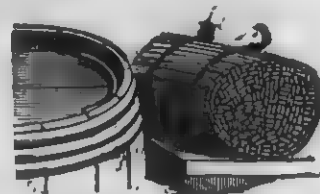
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No one should think of going South without visiting the Mammoth Cave, the great natural wonder of this continent. So much has been written of this world-famous wonder, that it is impossible to say anything new in regard to it—it cannot be described; its caverns must be explored, its darkness felt, its beauties seen, to be appreciated or realized. It is the greatest natural curiosity—Niagara not excepted—and he whose expectations are not satisfied by its marvelous avenues, domes and starry grottoes must either be a fool or a demi-god. From Mobile to New Orleans (141 miles) the ride along the Gulf coast is alone worth the entire cost of the whole trip. In full sight of the Gulf all the way, past Ocean Springs, Mississippi City, Pass Christian, Bay St. Louis, and Beauvoir, the home of Jeff Davis.

When you decide to go South, make up your mind to travel over the line that passes through the best country, and gives you the best places to stop over. This is emphatically the MONON ROUTE, in connection with the Louisville and Nashville and the Cincinnati Southern Railways, Pullman Palace Sleepers, Palace Coaches, double daily trains. The best to Cincinnati, Louisville, New Orleans or Florida. For full information, descriptive books, pamphlets, etc., address E. O. McCORMICK, Gen'l Northern Passenger Agent Monon Route, 73 Clark street, Chicago, or Wm. S. BALDWIN, Gen'l Passenger Agent, 183 Dearborn Street, Chicago.

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"IMPROVED SPECIAL PURIFIER"

over all others, and having faith that we are building the best purifier made in this country, we propose to enter into PUBLIC TEST with any well known standard purifier, the expense of such test to be born equally by those entering into the same. The judges shall be selected by lot from fifty expert millers and shall perform their duties under oath.

We make another proposition to the millers. We will send our IMPROVED SPECIAL PURIFIER on trial to be tested against any machine made, and if it does not prove not only equal but SUPERIOR in its AGGREGATE MERITS to any purifier made, it may be returned at our expense.

We know absolutely beyond the least possibility of doubt that we are making the BEST PURIFIER MADE IN THE WORLD, and can prove it if any firm dare meet us in public test.

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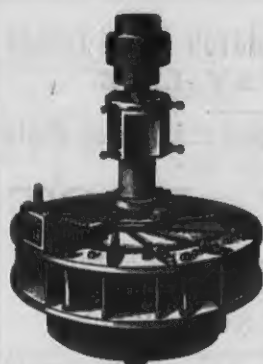
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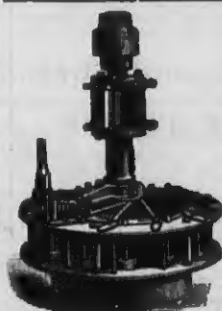
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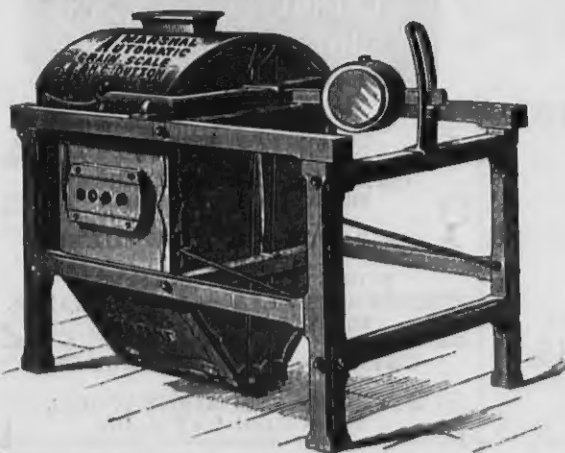
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This Scale is designed for weighing and registering the amount of grain transferred from one point to another. The weighing and recording is absolutely correct, and the machines are sold with a guarantee to that effect. By their use the miller can tell at any time how much wheat he is using to make a barrel of flour and know at once whether he is milling at a profit or loss. This scale can be used with equal advantage by shippers of grain or others who desire to know how much grain, flour feed, bran, shorts, screenings, coal (or any other thing that can be spouted), is being transferred, with a perfect record made of same.

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Yours truly,

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	—BETWEEN—	
3	CHICAGO AND WAUKESHA.	3
	—BETWEEN—	
2	CHICAGO AND MILWAUKEE.	2
	—AND—	
1	FOND DU LAC, OSHKOSH,	1
	CHIPPEWA FALLS and EAU CLAIRE.	
	—BETWEEN—	
	CHICAGO AND MILWAUKEE,	
	—AND—	
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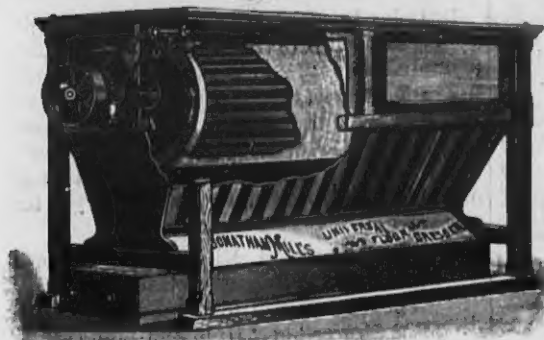
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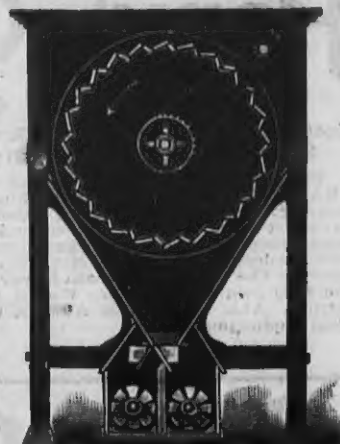
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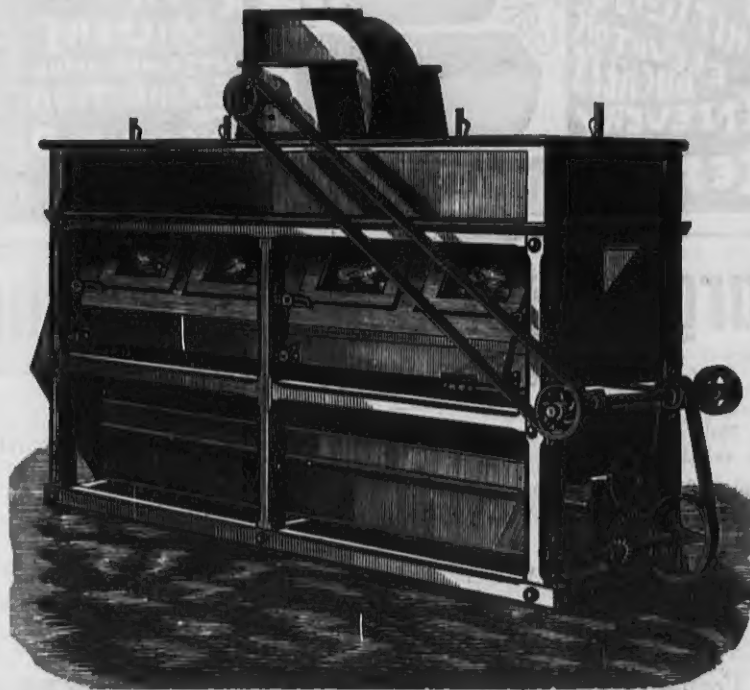
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